

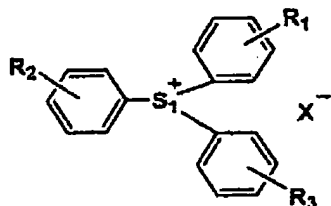
Appl. No. 10/648,579  
Reply to Office Action of October 19, 2005

This listing of claims will replace all prior versions, and listings, of claims in the application:

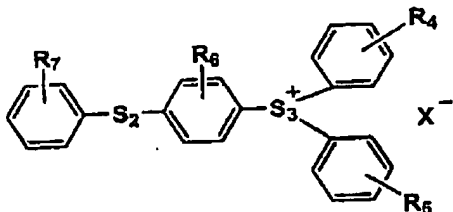
Listing of Claims:

1. (Currently amended) An actinic radiation curable composition, comprising a photopolymerizable monomer and a photo-acid generating agent selected from the group consisting of compounds represented by Formulas (I) -(III):

Formula (I)



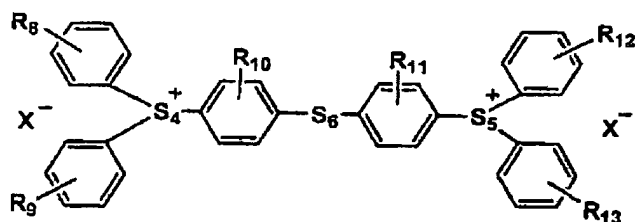
Formula (II)



Appl. No. 10/648,579

Reply to Office Action of October 19, 2005

Formula (III)



wherein R<sub>1</sub> - R<sub>13</sub> each represents a hydrogen atom or a substituent selected from the group consisting of an alkyl group, a halogenated alkyl group, an alkoxy group, a carbonyl group, a phenylthio group, a halogen atom, a cyano group, a nitro group and a hydroxy group, provided that R<sub>1</sub> - R<sub>3</sub>, R<sub>4</sub> - R<sub>7</sub> and R<sub>8</sub> - R<sub>13</sub> do not represent a hydrogen atom at the same time,

S<sub>1</sub>- S<sub>6</sub> each represents a sulfur atom,

a maximum bond distance between S<sub>1</sub> and the adjacent C atom in Formula (I), a maximum bond distance between S<sub>3</sub> and the adjacent C atom in Formula (II), a maximum bond distance between S<sub>4</sub> and the adjacent C atom and a maximum bond distance between S<sub>5</sub> and the adjacent C atom in Formula (III), are ~~0.1686 - 0.1750~~ 0.1688 - 0.1750 nm, respectively,

and X represents a non-nucleophilic anion group.

Appl. No. 10/648,579  
Reply to Office Action of October 19, 2005

**2. (Previously Presented)** The actinic radiation curable composition of claim 1, comprising the photopolymerizable monomer having an oxetane ring in the molecule.

**3. (Previously Presented)** The actinic radiation curable composition of claim 1, comprising the photopolymerizable monomer having an oxirane group in the molecule.

**4. (Original)** The actinic radiation curable composition of claim 1, comprising the following photopolymerizable monomers

(a) a compound having at least one oxetane ring in the molecule in an amount of 60 - 95 weight percent;

(b) a compound having at least one oxirane group in an amount of 5 - 40 weight percent; and,

(c) a vinyl ether compound in an amount of 0 - 40 weight percent,

each weight percent being based on the total weight of the composition.

Appl. No. 10/648,579  
Reply to Office Action of October 19, 2005

**5. (Original)** The actinic radiation curable composition of claim 1, comprising the following photopolymerizable monomers:

- (a) a compound having one oxetane ring in the molecule; and
- (b) a compound having at least two oxetane rings in the molecule.

**6. (original)** The actinic radiation curable composition of claim 1, having a viscosity of 7 - 50 mPa's at 25°C.

**7. (Previously Presented)** The actinic radiation curable composition of claim 1 which is an ink-jet ink and further comprises a pigment.

**8. (Withdrawn)** An image forming method using the actinic radiation curable ink of claim 7, comprising the steps of:

- (a) jetting a droplet of the ink from a nozzle of an ink-jet recording head to form an image onto a recording material; and
  - (b) irradiating the image with an actinic ray,
- wherein the irradiation step is carried out between 0.001 and 2.0 seconds after jetting the droplet of the ink.

Appl. No. 10/648,579  
Reply to Office Action of October 19, 2005

**9. (Withdrawn)** An image forming method using the actinic radiation curable ink of claim 7, comprising the steps of:

(a) jetting a droplet of the ink from a nozzle of an ink-jet recording head to form an image onto a recording material; and

(b) irradiating the image with an actinic ray, wherein after the irradiation step, a thickness of the ink on the recording material is 2 - 20  $\mu\text{m}$ .

**10. (Withdrawn)** An image forming method using the actinic radiation curable ink of claim 7, comprising the steps of:

(a) jetting a droplet of the ink from a nozzle of an ink-jet recording head to form an image onto a recording material; and

(b) irradiating the image with an actinic ray,

wherein a volume of the droplet of the ink jetted from the nozzle is 2 - 15 pl.

**11. (Withdrawn)** An ink-jet recording apparatus for the image forming method of claim 8, wherein the actinic radiation curable ink and the recording head is heated to 35 - 100°C before the jetting step is carried out.

Appl. No. 10/648,579  
Reply to Office Action of October 19, 2005

**12. (Previously Presented)** The actinic radiation curable composition of claim 1, wherein the substituent of  $R_1 - R_{13}$  is selected from the group consisting of a methyl group, an ethyl group, a propyl group, an isopropyl group, a butyl group, an isobutyl group, a t-butyl group, a pentyl group, a hexyl group; a trifluoromethyl group, a difluoromethyl group; a methoxy group, an ethoxy group, a propoxy group, a butoxy group, a hexyloxy group, a decyloxy group, a dodecyloxy group; an acetoxy group, a propionyloxy group, a decylcarbonyloxy group, a dodecylcarbonyloxy group, a methoxycarbonyl group, an ethoxycarbonyl group, a benzoyloxy group; a phenylthio group; fluorine, chlorine, bromine, iodine; a cyano group; a nitro group; and a hydroxy group.